Medical Expenditure Panel Survey

Agency for Healthcare Research and Quality

STATISTICAL BRIEF #100

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Trends in Children's Eligibility for Public Insurance for Families with Children, 1996–2002 (First Half)

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Introduction

Children's eligibility for public insurance in the United States is typically determined at the family level. Family income, family size, and age of child are the key components to determining eligibility for both Medicaid and the State Children's Health Insurance Program (SCHIP). Nevertheless, statistics for children's eligibility for public health insurance are often reported at the person level.

Family-level statistics provide a different aspect on children's eligibility. They have the potential to differ from child-level statistics because families often have multiple children in the same household. Children who are eligible for public insurance may be concentrated in a small subset of large families or may be spread across many smaller families. Also, because Medicaid income thresholds for eligibility can vary by age, children in the same family may have differing eligibility. When families have multiple children with different types of eligibility or have varying concentrations of children with the same type of eligibility, family-level statistics provide additional information for researchers that is not available at the child level. All estimates in this brief are presented at the family level and include only those families with children age 18 and under.[1]

This Statistical Brief presents estimates from the KIDSIM eligibility simulation model for the population of children in the Medical Expenditure Panel Survey (MEPS) in the first part of calendar years 1996 through 2002. The KIDSIM model supplements MEPS data with annual state-level eligibility rules for both Medicaid and SCHIP. For ease of presentation, the word "family" will be used to represent families with children ages 18 and under. For this analysis, families are constructed to include adults and children who would typically be eligible for coverage under the adults' private health insurance family plans (for example, children and their parents). Eligibility rules are applied to these families using the appropriate definition of family for the program in question: Medicaid or SCHIP.

[1] Selden, T. M., Hudson, J. L. and Banthin, J. S. Tracking Changes in Eligibility and Coverage among Children, 1996–2002. *Health Affairs* 23, no. 5 (2004): 39–50. This article presents MEPS estimates for children's eligibility for public health insurance at the person level.

Highlights

- In the first part of 2002, 48.2 percent of families had at least one child who was eligible for public insurance, an increase of almost 18 percentage points over the first part of 1996. This represented 20.3 million families, an increase of over 8 million families.
- Increases in the percentage of families with at least one child eligible for public insurance were primarily due to the implementation and expansion of the SCHIP program.
- Between 1996 and 2002, the percentage of families with at least one child eligible for Medicaid was relatively stable at between 27 percent and 29 percent while those with at least one child eligible for SCHIP increased almost 20 percentage points from 1.8 percent to 21.7 percent.
- In the first part of 2002, 51.8 percent of families had no children eligible for public insurance; 26.1 percent had all their children eligible for Medicaid; 19.2 percent had all their children eligible for SCHIP; and 2.8 percent had children with different types of eligibility for public insurance.
- From the first part of 1996 to the first part of 2002, families with no children eligible for public insurance decreased by 18 percentage points; those with all children eligible for SCHIP increased by 18 percentage points; and those with children of differing eligibility decreased by 2 percentage points.

Children's eligibility for public insurance at the family level is reported using a variety of statistics. The prevalence of eligibility is reported as both the percentage and the number of families with at least one child eligible for public insurance. Separate estimates are given for the percentage of families where at least one child is eligible for Medicaid and for SCHIP. A more detailed measure reports children's eligibility for public insurance across four categories: 1) families where all children are not eligible for public insurance, 2) families where all children are eligible for Medicaid, 3) families where all children are eligible for SCHIP, and 4) families where children in the same family have different types of eligibility for public insurance (for example, one child may be eligible for SCHIP while another is eligible for Medicaid or is not eligible at all).

All differences between estimates discussed in the test are statistically significant at the 0.05 level unless otherwise noted.

Findings

In the first part of 2002, 48.2 percent of U.S. families had at least one child eligible for public insurance (figure 1). This represents a significant increase of almost 18 percentage points since the first part of 1996, when 30.3 percent of families had at least one eligible child. The number of families with at least one child eligible for public insurance increased dramatically by over 8 million from 12.1 million in the first part of 1996 to 20.3 million in the first part of 2002 (figure 2).

Much of the increase in children's eligibility has been driven by families whose children gained eligibility through the implementation of the SCHIP program. The percentage of families with at least one child eligible for SCHIP increased almost 20 percentage points between the first parts of 1996 and 2002 (1.8 percent to 21.7 percent) with the largest gains seen between 1998 and 2001 (figure 3). Meanwhile, the percentage of families where at least one child was eligible for Medicaid remained relatively stable, between 27 percent and 29 percent.

In the first part of 2002, the majority of U.S. families, 51.8 percent, had no children eligible for public insurance (figure 4). This represents 21.9 million families with children (not shown). Among the families with at least one child eligible for public insurance, most families had all their children eligible for Medicaid: 11.0 million (not shown), or 26.1 percent, of all families had all Medicaid-eligible children (figure 5). Alternatively, 8.1 million (not shown), or 19.2 percent of families, had all children eligible for SCHIP (figure 4). A small percentage of families (2.8 percent) had children with differing eligibility in the same family. All 1.2 million (not shown) of these families had at least one child eligible for public insurance (either Medicaid or SCHIP or both) but 23.8 percent (not shown) of these families also had at least one child who was not eligible for public insurance.

In a comparison to children's eligibility for public insurance for families in the first part of 1996, increases in children's eligibility for public insurance in families with children by 2002 were primarily driven by increases in families with all children eligible for SCHIP (figure 5). The percentage of families with no children eligible for public insurance dropped 18 percentage points between 1996 and 2002 (from 69.7 percent to 51.8 percent), and the percentage of families with all children eligible for SCHIP increased by 18 percentage points (from 1.1 percent to 19.2 percent). Over the same time period, the percentage of families with all children eligible for Medicaid went from 23.9 percent to 26.1 percent while the percentage of families with mixed eligibility dropped from 5.3 percent to 2.8 percent.

Data Source

The estimates provided in this Statistical Brief come from the KIDSIM model, created and maintained by AHRQ's Division of Modeling and Simulation in the Center for Financing, Access, and Cost Trends. This model uses 1996 through 2002 MEPS Household Component Files (HC-01, HC-05, HC-09, HC-13, HC-22, HC-34, and HC-53) with point-in-time estimates for the early part of calendar years 1996 through 2002 for Round 1 persons in Panels 1 through 7 and Round 3 persons in Panels 1, 2 and 4 through 6. The Household Component point-in-time files contain data on family structure, employment, health insurance, health status, and demographic characteristics of both individuals and households for the first part of the calendar year.

Definitions

Family
Families are constructed to include adults and those family members who would typically be eligible for coverage under the adults' private health insurance family plans, a grouping otherwise known as health insurance eligibility units (HIEUs). These families comprise adults, their spouses and their unmarried natural/adoptive children age 18 and under. Unmarried minors living without their natural/adoptive parents are included in the family of their stepparent, grandparent, or aunt/uncle. Married minor children are placed in a separate family with their spouses and their own children. Children of unmarried minors are placed, along with their minor parent, in the family of their adult grandparents. Foster children and unmarried minors living without any adult family member constitute their own independent families without adults.

Family definitions may differ from the HIEU concept when counting family income and family size for Medicaid or SCHIP eligibility. While statistics in this brief are presented for families using the HIEU definition, the KIDSIM model follows the appropriate family definition for calculating eligibility.

Age
Children are ages 18 and under. Note that some other MEPS Statistical Briefs use different age ranges for children and adults and will report slightly different estimates for insurance status.

Eligibility for public insurance for children
Eligibility for public insurance for children is calculated for the population of children in MEPS using state-level eligibility rules in AHRQ's KIDSIM model. Eligibility is calculated for Rounds 1 and 3 of the survey. In these files, the round took place in the first part of calendar years 1996 through 2002. Individual eligibility for public insurance is defined by the following mutually exclusive categories: 1) eligible for Medicaid, 2) eligible for SCHIP, and 3) not eligible for public insurance. Some states ran SCHIP-like programs with premiums via waivers before SCHIP was implemented and later converted these programs to SCHIP. KIDSIM simulates these programs in the pre-SCHIP years, and children eligible for these state-level programs are included in the SCHIP category.

Eligibility for public insurance for families
Children's eligibility for insurance at the family level is based on the eligibility status of the children within each family and, therefore, also reflects eligibility in Rounds 1 and 3 of the survey. This represents eligibility for public insurance in families for the first part of calendar years 1996 through 2002. Family-level eligibility for public insurance is defined by the following mutually exclusive categories describing eligibility for public insurance for children within the family: 1) all children not eligible for public insurance, 2) all children eligible for Medicaid, 3) all children eligible for SCHIP, and 4) children in the same family with differing eligibility for public insurance. An example of category 4 is a family with one child who is eligible for SCHIP and another child who is eligible for Medicaid (or one who is not eligible for any public insurance).

Statistics on A) families with at least one child eligible for Medicaid and B) at least one child eligible for SCHIP are not mutually exclusive. If a family has a one child who was eligible for Medicaid and another child who was eligible for SCHIP, they would be represented in categories A and B. However, in the measure above, they would appear in category 4 (but not in category 2 or category 3).

About MEPS-HC

MEPS-HC is a nationally representative longitudinal survey that collects detailed information on health care utilization and expenditures, health insurance, and health status, as well as a wide variety of social, demographic, and economic characteristics for the civilian noninstitutionalized population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301-427-1656) or visit the MEPS Web site at http://www.meps.ahrq.gov/.

References

For a detailed description of the MEPS survey design, sample design, and methods used to minimize sources of nonsampling error, see the following publications:

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component.* MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, Md.: Agency for Health Care Policy and Research, 1997.

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component.* MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, Md.: Agency for Health Care Policy and Research, 1997.

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care,* July 2003: 41(7) Supplement: III-5–III-12.

Suggested Citation

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools and to share suggestions on how MEPS products might be enhanced to further meet your needs. Please e-mail us at mepspd@ahrq.gov or send a letter to the address below:

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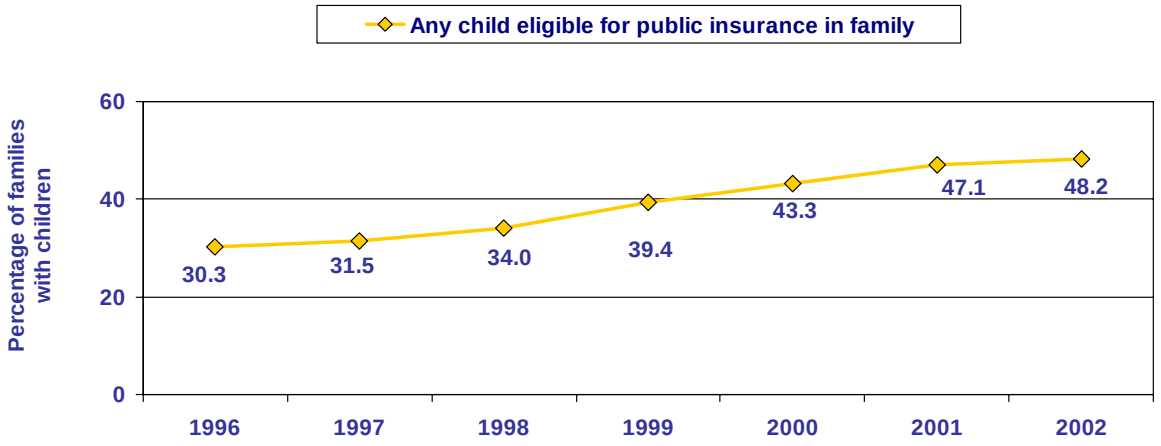
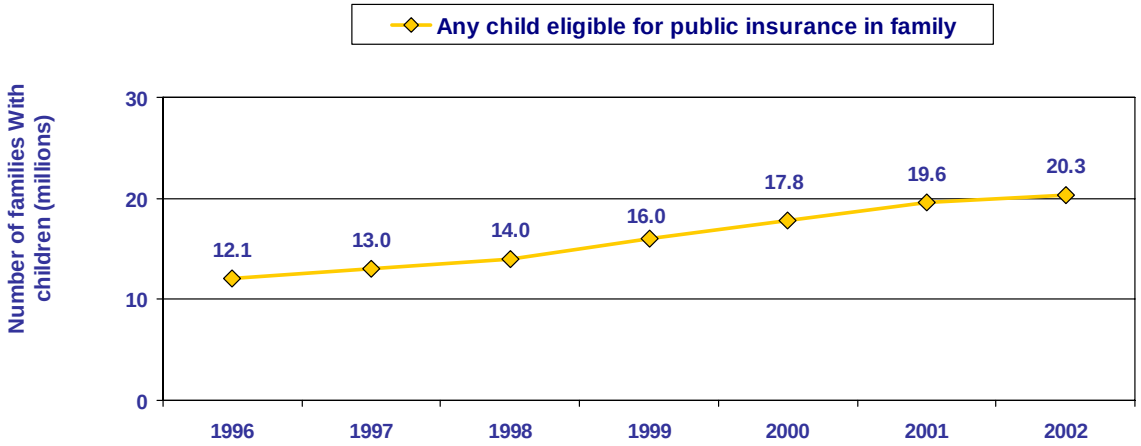
Figure 1. Trends in children's eligibility for public insurance for families with children, 1996–2002



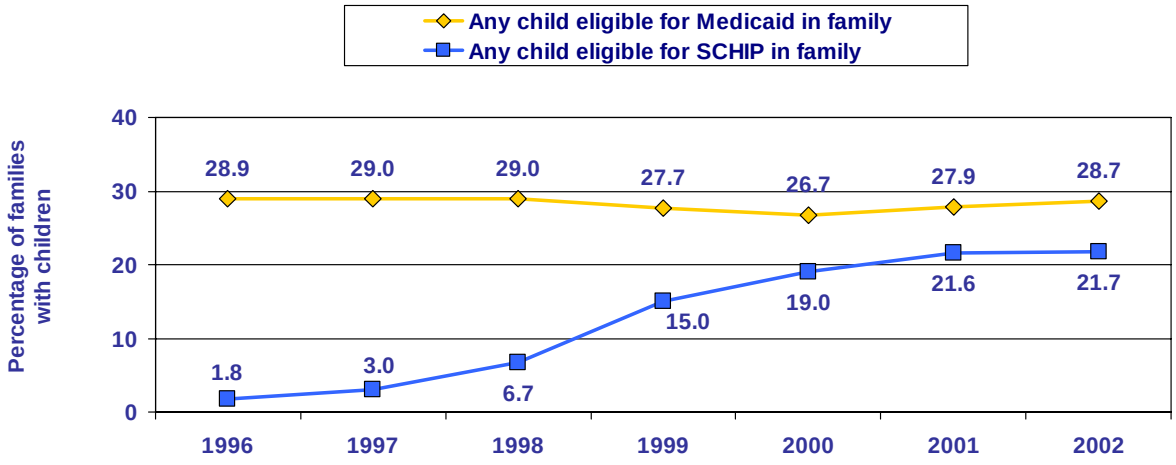
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1996–2002 Point-in-Time Files.

Figure 2. Trends in children's eligibility for public insurance for families with children, 1996–2002



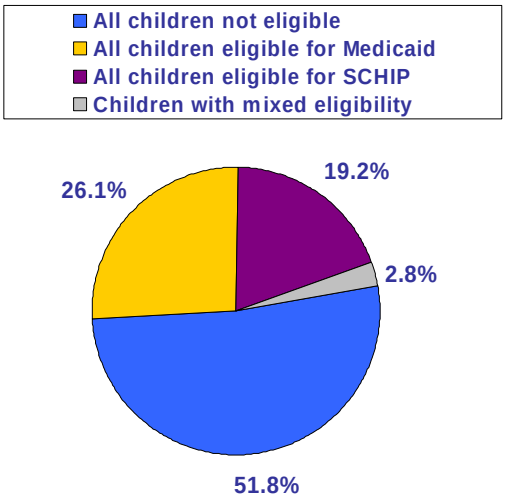
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1996–2002 Point-in-Time Files.

Figure 3. Trends in children's eligibility for public insurance for families with children: Medicaid and SCHIP, 1996–2002



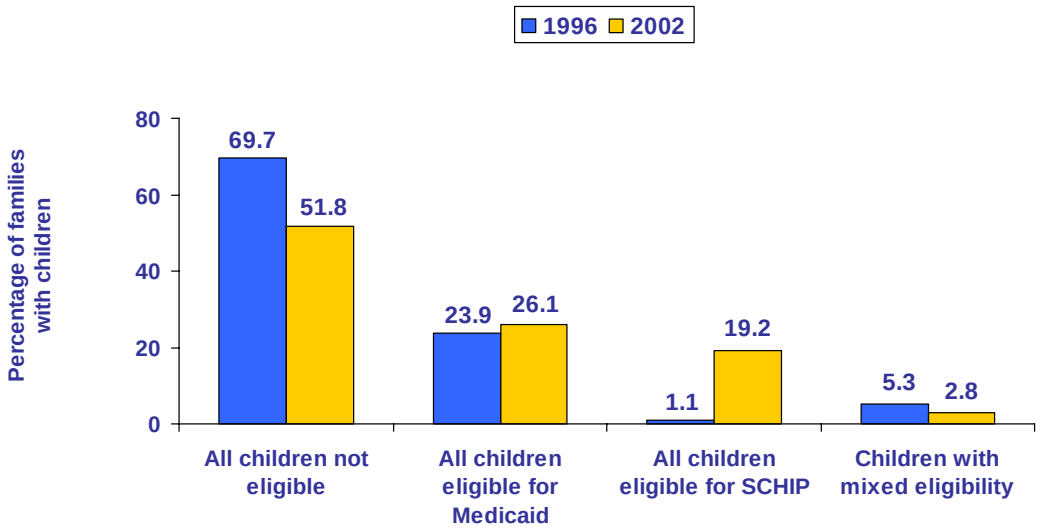
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1996–2002 Point-in-Time Files.

Figure 4. Children's eligibility for public insurance for families with children, 2002



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1996–2002 Point-in-Time Files.

Figure 5. Children's eligibility for public insurance for families with children, 1996 versus 2002



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1996–2002 Point-in-Time Files.